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09/846,750	04/30/2001	Louis Arquie	K35A0767	4477

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HENSLEY KIM & EDGINGTON, LLC
1660 LINCOLN STREET
SUITE 3050
DENVER, CO 80264

EXAMINER
NGUYEN, LE V

ART UNIT	PAPER NUMBER
2174	

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/846,750	ARQUIE ET AL.
	Examiner	Art Unit	
	Le Nguyen	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 May 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 12-38* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 12-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *12/7/06* .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This communication is responsive to an amendment filed 5/17/05.

2.   Claims 1-9 and 12-38 are pending in this application. Claims 1, 8, 20, 25, 30 and

31 are independent claims. Claims 30-38 have been added; claims 1, 8, 20, 25, 28 and

29 have been amended; and, claims 10 and 11 have been canceled. This action is

made non-final and replaces the previous office action due to the following reason:

although the application correctly reflects its non-final status in PALM, the status of the

application is final in PAIR.

3.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

5.   Claims 30-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention. "[T]he expanded displayed device node

displaying a plurality of port information indicators *not displayed by the displaying*

operations" of lines 11-12 of claims 30 and 31 has not been properly described in the

application as filed. Similarly, "the expanded displayed device node *only* displays port

information" of lines 1-2 of claim 35 has not been properly described in the application

as filed. References to "show[ing]" or expanding device nodes in the specification is for

the "show" feature of *displaying* device nodes with port information and not for a show

feature separate from a display feature nor for a show feature that "*only* display[s] port

information" to the extent that all other information but port information are displayed.

Claim Rejections - 35 USC § 103

6.   Claims 1-4, 7-9, 14, 15, 18-21, 30-32, 35, 37 and 38 are rejected under 35

U.S.C. 103(a) as being unpatentable over Walker et al. ("Walker") in view of Nulu et al.

("Nulu").

        As per claim 1, Walker teaches a computer-implemented method of displaying

device port information in a network topology display, comprising: displaying a device

node in a network topology display, the displayed device node representing a

connection device in a network, the connection device having one or more connection

ports for connecting to one or more devices in the network (figs. 4-5; *displayed are*

nodes wherein in networking nodes are devices connected to the network); displaying

one or more connection paths coupled to the displayed device node, the connection

paths representing connections to the one or more ports of the connection device (figs.

4-5; *port information displayed such as port number ("Port 1") and port type (of duplex*

type)); and selectively expanding the displayed device node in response to a user

selection, wherein the expanded node includes port information for each of the one or

more ports having a connection to another device in the network corresponding to the

connection paths (figs. 4-5; col. 4, lines 30-64; col. 5, lines 11-29; col. 8, line 19 through

col. 9, line 33). Walker does not explicitly disclose expanding the displayed device node

in response to a user selection of the device node. Nulu teaches a computer-

implemented method of displaying device port information in a hardware topology

display, comprising expanding the displayed device node in response to a user

selection of the device node corresponding to the connection paths (col. 6, lines 46-52).

Therefore, it would have been obvious to an artisan at the time of the invention to

include Nulu's teaching of expanding the displayed device node in response to a user

selection of the device node in a computer-implemented method of displaying device

port information in a tree view of hardware connections which include port information to

Walker's teaching of expanding the displayed device node in response to a user

selection in a computer-implemented method of displaying device port information in a

tree view of device connections which include virtual port information in order to provide

users with architectural perspectives that are rapidly obtainable.

As per claim 2, the modified Walker teaches a computer-implemented method of

displaying device port information in a network topology display wherein the displayed

device node represents a connection device selected from the group consisting of a

switch, a hub and a router (Walker: figs. 1, 4 and 5; col. 3, line 47 through col. 4, line 28;

col. 4, lines 56-64; col. 5, lines 11-39).

As per claim 3, the modified Walker teaches a computer-implemented method of

displaying device port information in a network topology display wherein the port

information includes the port number (Walker: figs. 4-5; col. 4, lines 56-64; col. 5, lines 11-39; *Port 1*).

As per claim 4, the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display wherein the port information includes a port connection type indicator (Walker: figs. 4-5; col. 4, lines 56-64; col. 5, lines 11-39; *of duplex type*).

As per claim 7, the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display wherein the displayed device node represents the connection device and one or more devices connected to the connection device (Walker: figs. 4-5 *and respective portions of the specification*).

Claim 8 is similar in scope to the combination of claims 3 and 4 and is therefore rejected under similar rationale.

Claims 9 and 21 are individually similar in scope to claim 2 and are therefore rejected under similar rationale.

Claim 14 is similar in scope to claim 7 and is therefore rejected under similar rationale.

As per claim 15, Walker teaches a computer-implemented method of displaying device port information in a network topology display wherein the user selection includes selecting the displayed device node with a user input device (col. 3, lines 60-61; col. 4, lines 42-47; col. 5, lines 23-25).

As per claim 18, the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display comprising removing

the displayed port information from the display in response to a user selection to

remove port information (Walker: figs. 1, 4 and 5; col. 3, line 47 through col. 4, line 28;

col. 4, lines 56-64; col. 5, lines 11-39; *port information is displayed only as long as*

users' pointers rest on the graphical representation).

As per claim 19, Walker teaches a computer-implemented method of displaying

device port information in a network topology display wherein the displayed device node

represents the connection device and one or more devices connected to the connection

device (figs. 1, 4 and 5).

Claim 20 is similar in scope to the combination of claims 3 and 4 and is therefore

rejected under similar rationale except for the claimed feature of an indication of the

ports having no connection, which is inherent given that the topology displays devices

and their port connections so that not displaying a port with the device would be an

indication that the device has no port connection.

Claims 30 and 31 are individually similar in scope to claim 1 and are therefore

rejected under similar rationale.

As per claim 32, the modified Walker teaches a computer-readable medium

having computer-executable instructions for performing a computer process, the

computer process comprising detecting another user input event associated with the

network topology display and modifying the network topology display to collapse the

expanded displayed device node in the network topology display responsive to the

operation of detecting another user input event, the collapsed displayed device node

omitting display of the port information indicators (Walker: figs. 4-5; col. 4, lines 30-64;

col. 5, lines 11-29; col. 8, line 19 through col. 9, line 33).

As per claim 35, the modified Walker teaches a computer-readable medium

having computer-executable instructions for performing a computer process, the

computer process wherein the expanded displayed device node displays port

information indicators for connection ports of the connection device having

communicative connections to one or more other devices in the network (Walker: figs.

4-5; col. 4, lines 56-64; col. 5, lines 11-39; *Port 1*).

As per claim 37, the modified Walker teaches a computer-readable medium

having computer-executable instructions for performing a computer process, the

computer process wherein at least one port information indicator displays a port

connection type indicator (Walker: figs. 4-5; col. 4, lines 56-64; col. 5, lines 11-39; *of

duplex type*).

As per claim 38, the modified Walker teaches a computer-readable medium

having computer-executable instructions for performing a computer process, the

computer process wherein at least one port information indicator displays a port number

indicator (Walker: figs. 4-5; col. 4, lines 56-64; col. 5, lines 11-39; *Port 1*).

7.   Claims 5, 6, 12, 13, 23-26, 28, 33 and 34 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Walker et al. ("Walker") in view of Nulu et al. ("Nulu") as

applied to claims 1, 8 and 20, and further in view of Dev et al. ("Dev").

As per claim 5, although the modified Walker teaches a computer-implemented

method of displaying device port information in a network topology display wherein

selectively expanding includes displaying the port information proximal the connection bar one or more ports having a connection (Walker: figs. 4 and 5; Nulu: col. 6, lines 46-52), the modified Walker does not explicitly disclose displaying the port information proximal the connection bar for each of the one or more ports having a connection. Dev teaches a computer-implemented method of displaying device port information in a network topology display wherein selectively expanding includes displaying a connection bar and displaying the port information proximal the connection bar for each of the one or more ports having a connection (figs. 7A-8B; col. 5, line 41 through col. 6, line 19; col. 13, line 30 through col. 14 line 25). Therefore, it would have been obvious to an artisan at the time of the invention to include Dev's method of displaying device port information in a network topology display wherein selectively expanding includes displaying a connection bar to the modified Walker's method of displaying device port information in a network topology display wherein selectively expanding includes displaying the port information proximal the connection bar for each of the one or more ports having a connection in order to provide users with a method of traversing between location and topological views to obtain any necessary information regarding the configuration of the network all at once.

As per claim 6, the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display wherein the displayed port information for each port is displayed proximal the connection bar in a location indicating the relative location of the corresponding connected device in the network topology display (Dev: figs. 7A-8B).

Claims 12, 23 and 34 are individually similar in scope to claim 5 and are therefore rejected under similar rationale.

Claims 13, 24 and 33 are individually similar in scope to claim 6 and are therefore rejected under similar rationale.

Claim 25 is similar in scope to claim 13, which is similar in scope to claim 6, and is therefore rejected under similar rationale.

As per claim 26, the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display wherein the port information corresponding to the portion of the connection ports is displayed within the expanded view at elevations corresponding to elevations in the network topology display of the other devices connected to the device node (Walker: figs. 4-5; col. 4, lines 56-64; col. 5, lines 11-39; Dev: figs. 7A-8B; col. 13, line 30 through col. 14 line 25; col. 5, line 41 through col. 6, line 19; Nulu: col. 6, lines 46-52; *selective locating of port information and the use of elevations*).

As per claim 28, the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display wherein the port information is selected from the group of port information consisting of port type, and port state (Walker: figs. 4 and 5; *displayed port information such as port number, port type and port state, i.e. connected Port 1 of duplex type*).

8.   Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. ("Walker") in view of Nulu et al. ("Nulu") as applied to claim 8, and further in view of Dev et al. ("Dev").

As per claim 16, although the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display wherein the user selection includes selecting a show ports option by clicking on icons (Walker: figs. 1, 4 and 5; col. 3, line 47 through col. 4, line 28; col. 4, lines 56-64; col. 5, lines 11-39), Walker does not explicitly disclose the user selection to include selecting a show ports option from a menu of options. Dev teaches a computer-implemented method of displaying device port information in a network topology display wherein the user selection includes both selecting a show ports option by clicking on icons *and* selecting a show ports option from a menu of options (col. 14, lines 9-13). Therefore, it would have been obvious to an artisan at the time of the invention to include Dev's method of selecting a show ports option from a menu of options in a computer-implemented method of displaying device port information in a network topology display with the modified Walker's method of displaying device port information in a network topology display wherein the user selection includes both selecting a show ports option by clicking on icons in a computer-implemented method of displaying device port information in a network topology display in order to provide an additional method of selection that is common to window based displays.

As per claim 17, the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display comprising displaying the menu of options in response to a user selection of the displayed device node (Dev: col. 13, line 30 through col. 14, line 13).

9.   Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker

et al. ("Walker") in view of Nulu et al. ("Nulu") as applied to claim 20.

As per claim 22, although the modified Walker teaches a computer-implemented

method of displaying device port information in a network topology display wherein the

network is a LAN, the modified Walker does not explicitly disclose a computer-

implemented method of displaying device port information in a network topology display

wherein the network is a SAN. Official Notice is taken that SAN is well known in the art.

Therefore, it would have been obvious to an artisan at the time of the invention to

include a SAN to the modified Walker's LAN in order to provide the scalability, speed

and manageability required in environments that demand high data availability.

10.   Claims 27 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Walker et al. ("Walker") in view of Nulu et al. ("Nulu") and Dev et al. ("Dev") as

applied to claim 20, and further in view of Simpson.

As per claim 27, although the modified Walker teaches a computer-implemented

method of displaying device port information in a network topology display wherein the

expanded view comprises port information for the connection ports of the device node

that are connected to devices in the network and not displaying ports not connected to

devices in the network, the modified Walker does not explicitly disclose displaying ports

that are not connected to the other devices in the network. Simpson teaches displaying

ports that are connected as well as ports that are not connected to other devices in the

network (col. 10, line 54 through col. 11, line 10). Therefore, it would have been obvious

to an artisan at the time of the invention to include Simpson's teaching of displaying

ports that are connected as well as ports that are not connected to other devices in the network to the modified Walker's teaching of displaying ports that are connected to devices in the network so that users may recognize ports that are available for communication.

Claim 36 is similar in scope to claim 27 and is therefore rejected under similar rationale.

11.   Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. ("Walker") in view of Nulu et al. ("Nulu") and Dev et al. ("Dev") as applied to claim 28, and further in view of Bare.

As per claim 29, although the modified Walker teaches a computer-implemented method of displaying device port information in a network topology display comprising receiving a user-input request for port information and displaying a subset of a group of port information (Walker: figs. 4-5; col. 4, lines 56-64; col. 5, lines 11-39; Dev: figs. 7A-8B; col. 13, line 30 through col. 14 line 25; col. 5, line 41 through col. 6, line 19; Nulu: col. 6, lines 46-52), the modified Walker does not explicitly disclose the user-input to be a configuration request defining a subset of the group of port information to be included in the displayed port information and wherein the displayed port information is configured to comprise the subset. Bare teaches a user-input to be a configuration request defining a subset of the group of port information to be included in the displayed port information and wherein the displayed port information is configured to comprise the subset (col. 2, lines 44-51). Therefore, it would have been obvious to an artisan at the time of the invention to include Bare's teaching of a user-input to be a configuration

request defining a subset of the group of port information to be included in the displayed

port information and wherein the displayed port information is configured to comprise

the subset to the modified Walker's teaching of a user-input request for port information

and displaying a subset of a group of port information in order to prevent loss of

connectivity in scenarios that include multiple load balance domains.

Response to Arguments

12.   Applicant's arguments with respect to claims 36-38 have been considered but are

moot in view of the new ground(s) of rejection, except for the following:

Applicant argued:

(a) Walker fail to disclose or suggest expanding a displayed node in a network

topology and that the expanded node includes port information in response to user

selection of the device node. Moreover, Nulu also fails to disclose or suggest expanding

a displayed device node in a network topology display.

(b) The Office has failed to support its arguments of inherency since it is likely

from the quoted language that only connected links (and therefore ports) are displayed

in Walker – unconnected ports are hidden.

The examiner disagrees for the following reasons:

Per (a), in response to applicant's arguments against the references individually,

one cannot show nonobviousness by attacking references individually where the

rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413,

208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed.

Cir. 1986). Walker teaches a network topology display that includes <u>one</u> *or* more port

information (figs. 4-5; col. 4, lines 30-64; col. 5, lines 11-29; col. 8, line 19 through col. 9,

line 33). The teaching extracted from Nulu is for the feature of expanding nodes (col. 6,

lines 46-52).

Per (b), Walker teaches a network management system that retrieves data from

the manged devices such as ports including indication of port connections wherein

indication of the ports having no connection is inherent given that the system retrieves

data from the manged devices such as ports and provides topology display of devices

with their port connections so that not displaying a port with the device would be an

indication that the device has no port connection (Walker: figs. 4-5; col. 4, lines 56-64;

col. 5, lines 11-39; *Port 1*).

Furthermore, the Office notes that applicant did not timely contest the factual

assertion set forth under Official Notice in paragraph two of section eleven of the Office

Action of 11/18/04.

Inquires

13.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Examiner Lê Nguyen whose telephone number is **(571)**

272-4068. The examiner can normally be reached on Monday - Friday from 7:00 am to

3:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

LVN
Patent Examiner
December 18, 2005

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100